



PAN AMERICAN
— SILVER —

ESG INVESTOR UPDATE

CONFERENCE CALL // SEPTEMBER 28, 2022

NASDAQ: PAAS
TSX: PAAS

CAUTIONARY NOTE

Non-GAAP Measures

This presentation of Pan American Silver Corp. and its subsidiaries (collectively, "Pan American", "Pan American Silver", the "Company", "we" or "our") refers to various non-GAAP measures, such as "AISC", "cash costs per ounce sold", "adjusted earnings" and "basic adjusted earnings per share", "total debt", "capital", "operating margin", "free cash flow" and "working capital". These measures do not have a standardized meaning prescribed by IFRS as an indicator of performance, and may differ from methods used by other companies. Silver segment Cash Costs and AISC are calculated net of credits for realized revenues from all metals other than silver, and are calculated per ounce of silver sold. Gold segment Cash Costs and AISC are calculated net of credits for realized silver revenues, and are calculated per ounce of gold sold. Consolidated Cash Costs and AISC are based on total silver ounces sold and are net of by-product credits from all metals other than silver.

Readers should refer to the "Alternative Performance (Non-GAAP) Measures" section of the Company's Management's Discussion and Analysis ("MD&A") for the period ended December 31, 2021 and in our most recently filed MD&A for the period ended June 30, 2022, each of which are available at www.sedar.com and on our website at www.panamericansilver.com.

Reporting Currency and Financial Information

Unless we have specified otherwise, all references to dollar amounts or \$ are to United States dollars.

Cautionary Note Regarding Forward Looking Statements and Information

This presentation contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, and "forward-looking information" within the meaning of applicable Canadian provincial securities laws. All statements, other than statements of historical fact, are forward-looking statements or forward-looking information. Forward-looking statements or information in this presentation relate to, among other things: our approach to sustainability, including our goals, initiatives and next

steps; our intention to formalize and standardize systems to manage ESG performance and risk across Pan American Silver; our intention to demonstrate progress against quantitative ESG targets, both at site and corporate level; our plans to implement ESG considerations into different parts of our business; our ability to attain certain ESG goals, including a reduction in energy usage and greenhouse gas emissions; and our future financial or operational performance.

These forward-looking statements and information reflect the current views of Pan American Silver with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by Pan American Silver, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies, and such uncertainty generally increases with longer-term forecasts and outlook. These assumptions include, among other things: that our compliance, safety, environmental and other risk management programs will be effective at eliminating certain risks related to our business; that our future financial or operational performance; sustainable development, safety, social performance, stakeholder engagement and relationships, human capital development, inclusion and diversity, environmental and tailings facility management, and mitigation of climate change (including with respect to greenhouse gas emissions, energy efficiency, and water management) will be as expected; currency exchange rates remain as estimated; availability of funds for Pan American Silver's projects and future cash requirements; that there are no labour-related disruptions at any of our operations; all necessary permits, licenses and regulatory approvals for our operations are received in a timely manner; our ability to secure and maintain title and ownership to properties and the surface rights necessary for our operations and activities; and our ability to comply with environmental, health and safety, and other laws. The foregoing list of assumptions is not exhaustive.

Forward-looking statements and information involve many known and unknown risks, uncertainties and other factors that could cause actual results or performance to be materially different from the results or performance that are or may be expressed or implied by such forward looking statements or information, including, but not limited to, factors, such as: relationships with, and claims by, local communities and Indigenous peoples; our ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner; changes in laws, regulations and government practices, as well as other legal or economic developments, in the jurisdictions where we may carry on business, including legal restrictions relating to mining; risks relating to the court-mandated ILO 169 consultation process in Guatemala; metal price fluctuations, fluctuation in the costs of energy, labour, materials and other

inputs, fluctuations in currency markets and exchange rates, operational risks and hazards inherent with the business of mining (including environmental accidents and hazards, industrial accidents, and severe weather events); risks relating to the credit worthiness, financial condition or business practices of suppliers, refiners and other parties with whom Pan American Silver does business; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards; the duration and effects of COVID-19 and any other pandemics on our operations, workforce and our activities relating to emissions and waste management; and those factors identified under the heading "Risks Related to Our Business" in Pan American Silver's most recent Form 40-F and Annual Information Form filed with the U.S. Securities and Exchange Commission and with Canadian provincial securities regulatory authorities, respectively. Pan American Silver has attempted to identify important factors, but there may be other factors that cause results not to be as anticipated, estimated, intended or described. Investors are cautioned against attributing undue certainty or reliance on forward-looking statements and information. Pan American Silver does not intend, nor assume, any obligation to update or revise forward-looking statements and information except to the extent required by applicable law.

Technical Information

Scientific and technical information contained in this presentation with respect to Pan American Silver Corp. has been reviewed and approved by Martin Wafforn, P.Eng., SVP Technical Services and Process Optimization, and Chris Emerson, FAusIMM, VP Business Development and Geology, who are Pan American's qualified persons for the purposes of Canadian National Instrument 43-101 ("NI 43-101"). Mineral reserves in this presentation were prepared under the supervision of, or were reviewed by, Martin Wafforn and Chris Emerson.

See Pan American's Annual Information Form dated February 23, 2022, available at www.sedar.com for further information on Pan American's material mineral properties as at December 31, 2021, including information concerning associated QA/QC and data verification matters, the key assumptions, parameters and methods used by the Pan American to estimate mineral reserves and mineral resources, and for a detailed description of known legal, political, environmental, and other risks that could materially affect Pan American's business and the potential development of Pan American's mineral reserves and resources.

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C O N T I N U E D

Cautionary Note to U.S. Investors Concerning Estimates of Mineral Reserves and Resources

Unless otherwise indicated, all mineral resource estimates included in this presentation have been prepared in accordance with Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects (“NI 43-101”) and the Canadian Institute of Mining, Metallurgy and Petroleum classification system. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Canadian standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission (the “SEC”), and mineral reserve and resource information included herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, this presentation uses the terms “measured mineral resources,” “indicated mineral resources” and “inferred mineral resources” as defined under Canadian regulations. The requirements of NI 43-101 for the identification of “reserves” are also not the same as those of the SEC, and mineral reserves reported by Pan American in compliance with NI 43-101 may not qualify as “mineral reserves” under SEC standards. In addition, disclosure of “contained ounces” in a mineral resource is permitted disclosure under Canadian regulations. Accordingly, information concerning mineral deposits set forth in this presentation may not be comparable with information made public by companies that report in accordance with U.S. standards.

The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the U.S. Securities Exchange Act of 1934, as amended. These amendments became effective February 25, 2019 (the “SEC Modernization Rules”) with compliance required for the first fiscal year beginning on or after January 1, 2021. Under the SEC Modernization Rules, the historical property disclosure requirements for mining registrants included in Industry Guide 7 under the U.S. Securities Act of 1933, as amended, were rescinded and replaced with disclosure requirements in subpart 1300 of SEC Regulation S-K. As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of “measured mineral resources,” “indicated mineral resources” and “inferred mineral resources.” In addition, the SEC has amended its definitions of “proven mineral reserves” and “probable mineral reserves” to be substantially similar to the corresponding standards under NI 43-101. While the above terms are “substantially similar” to the standards

under NI 43-101, there are differences in the definitions under the SEC Modernization Rules. As a foreign private issuer that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system (the “MJDS”), Pan American is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101. Accordingly, there is no assurance any mineral reserves or mineral resources that Pan American may report as “proven mineral reserves”, “probable mineral reserves”, “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources” under NI 43-101 would be the same had Pan American prepared the mineral reserve or resource estimates under the standards adopted under the SEC Modernization Rules. If Pan American ceases to be a foreign private issuer or loses its eligibility to file its annual report on Form 40-F pursuant to the MJDS, then Pan American will be subject to the SEC Modernization Rules, which differ from the requirements of NI 43-101.

U.S. investors should not assume that any part or all of an “inferred mineral resource”, a “measured mineral resource” or an “indicated mineral resource” will ever be converted into a higher category of mineral resources or into mineral reserves or that it will ever be economically or legally mineable. Mineralization described using these terms has a greater amount of uncertainty as to its existence and feasibility than mineralization that has been characterized as a mineral reserve. Further, “inferred mineral resources” have an even greater amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, U.S. investors are also cautioned not to assume that all or any part of “inferred mineral resources” exist. Under Canadian securities laws, estimates of “inferred mineral resources” may not form the basis of feasibility or pre-feasibility studies, except in rare cases.



THE WORLD'S PREMIER SILVER MINING COMPANY

NASDAQ: PAAS // TSX: PAAS



Diversified asset portfolio with 8 operations in the Americas

Revenues from Peru (44%), Mexico (29%), Canada (15%), Argentina (7%) & Bolivia (5%) in 2021



Large silver reserves¹



Responsible mining practices

- Implementation of industry best practices, such as Towards Sustainable Mining (TSM) and Voluntary Principles in Security and Human Rights; signatory to the United Nations Global Compact
- Sustainability Performance Indicators (SPIs)
- Environmental, Social and Governance (ESG) Management Committee

¹ See Company's website for further information on the Company's reserves and resources.

Corporate Office

Timmins

Dolores

La Colorada

Skarn Deposit

Escobal

(Escobal is currently on care and maintenance)

Shahuindo

La Arena

Huaron

Morococha

(Morococha is currently on care and maintenance)

San Vicente

Navidad

Manantial Espejo

● Mining Operations

● Development & Advanced Stage Exploration Projects



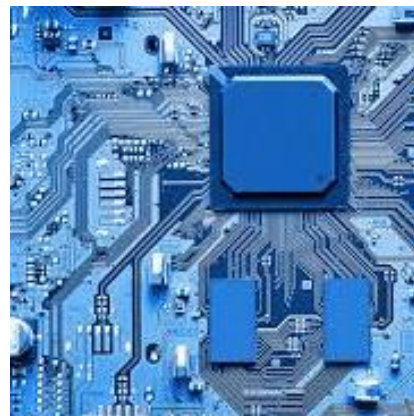
PAN AMERICAN
— SILVER —

SILVER: METAL OF THE FUTURE

// Growing industrial demand from global transition to decarbonization and electrification

- Silver has the highest electrical and thermal conductivity of all metals, making it an important metal in the transition to a low carbon economy.
- ~11% of silver supply used for photovoltaics (solar panels).
- ~33% of silver supply used in electrical applications. Shift to a low carbon economy involves an increase in electrical componentry, including electrical vehicles.
- Silver is an important component in the buildout of 5G networks, the next major evolution in communication technology.
- Silver has medical and sanitary applications because of its anti-bacterial properties.

Source: Silver Institute, World Silver Survey 2022



SUSTAINABILITY GOVERNANCE AND MANAGEMENT

// Structure and Accountability

BOARD OF DIRECTORS

- The Communities and Sustainable Development (CSD) Committee reviews the Company’s sustainability and ESG performance.
- The Health, Safety, and Environment (HSE) Committee provides policy direction and oversight of the performance on safety and technical matters relating to the environment.
- The Nominating and Governance Committee reviews and provides direction on the Company’s governance practices.
- The Human Resources and Compensation Committee assists the Board in fulfilling its responsibilities relating to human resources and compensation issues.

CORPORATE MANAGEMENT TEAM

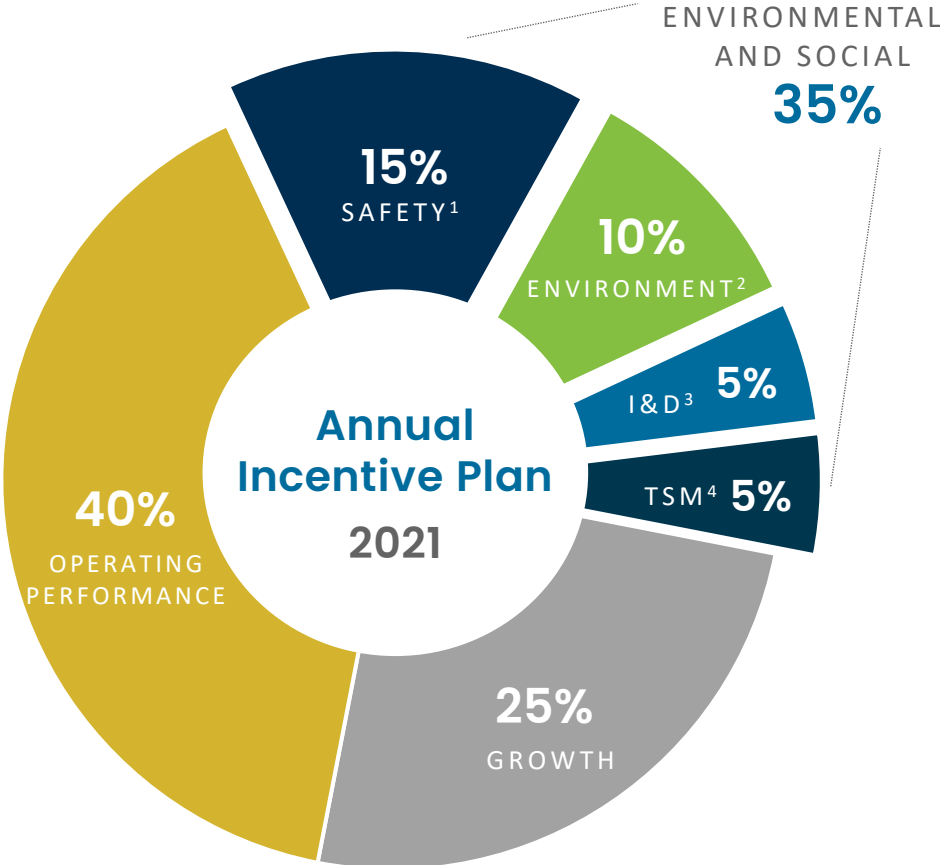
- Our CEO and senior leadership direct and oversee strategy, programs, initiatives, and performance related to communities, health and safety, environment and human resources. They also monitor sustainability indicator performance on a monthly basis.
- The ESG Management Committee supports the Company in fulfilling its ESG management responsibilities and enhancing its ESG performance.

COUNTRY MANAGERS

- Oversee and manage sustainability in each of the countries where we operate.

MINE MANAGERS

- Implement sustainability programs and initiatives and supervise teams responsible for community relations, environment, safety, and human resources.



¹ Lost time injury frequency (LTIF) and lost time injury severity (LTIS) targets.
² Significant Environmental Incidents (“SEIs”).
³ Inclusion & Diversity by percentage of women employees in the total workforce.
⁴ Level of performance of Mining Association of Canada’s TSM standard.



TRANSPARENCY, COMMITMENTS AND ESG RATINGS

Reporting Frameworks and Standards



Memberships and Commitments



Ratings and Rankings (as of Sept. 28, 2022)

S&P Global

68

Ranked top 10% in the Metals & Mining industry

Scale: 0 (worst) to 100 (best).

MSCI

BBB rating

Upgraded to 'BBB' from 'BB' in November 2021

Scale: CCC (worst) to AAA (best).



27.4 (medium risk)

#3 out of 26 companies in the Precious Metals Mining sector

Scale: 100 (worst) to 0 (best).

ISS ESG

Environment: 4

Social: 2

Governance: 1

Scale E&S: 1 (higher) to 10 (lower) disclosure.
G: 1 (lower) to 10 (higher) risk.

\$500 MILLION REVOLVING CREDIT FACILITY LINKED TO THIRD-PARTY ESG RATINGS (S&P GLOBAL AND MSCI)

2021 SUSTAINABILITY HIGHLIGHTS

ENVIRONMENT

 **ZERO**
SIGNIFICANT ENVIRONMENTAL INCIDENTS

 **11%**
REDUCTION IN GHG EMISSIONS COMPARED TO THE 2021 BASE CASE

 **85**
ACHIEVED NET POSITIVE 85 HECTARES OF REHABILITATED OR RESTORED LAND

 **10%**
REDUCTION IN WATER USE COMPARED TO THE 2021 BASE CASE

SOCIAL

 **\$11.2 MILLION**
IN COMMUNITY INVESTMENTS

 **1,242,545**
HOURS OF SAFETY TRAINING IN 2021

 **100%**
OF EMPLOYEES AND CONTRACTORS RECEIVED TRAINING ON THE FIRST MODULE OF OUR "BUILDING RESPECT TOGETHER" PROGRAM

 **SOCIAL MINE CLOSURE**
STANDARD DEVELOPED

GOVERNANCE

 **37.5%**
OF OUR BOARD MEMBERS ARE WOMEN, INCLUDING OUR BOARD CHAIR

 **100%**
OF BOARD MEMBERS, OFFICERS, EXECUTIVES, AND SENIOR MANAGEMENT CERTIFIED UNDER THE ANTI-CORRUPTION POLICY AND THE CODE OF ETHICAL CONDUCT

 **480**
KEY EMPLOYEES TRAINED ON CORRUPTION RISKS

Note: The 2021 base case is our projected 2021 GHG emissions and water use, as calculated using our life of mine plans adjusted for annual production guidance.

2022 ESG GOALS

ENVIRONMENT

- Achieve zero significant environmental incidents (SEIs) at our operations
- Improve on bi-annual environmental audit performance
- Reduce water use by 1% compared to the 2022 base case¹
- Reduce energy use by 3% compared to the 2022 base case¹
- Reduce GHG emissions by 3% compared to the 2022 base case¹
- Continue post-closure activities at Alamo Dorado and conduct interim reclamation projects at our active operations
- Achieve 100 hectares of reforestation or revegetation across all our sites
- Reduce non-rock related waste generation by 4% and increase recycled/reused waste by 11% compared to the 2022 base case¹

HEALTH & SAFETY

- Achieve zero fatalities
- Maintain lost time injury frequency (LTIF) of 0.90 or less
- Maintain lost time injury severity (LTIS) of 525 or less

SOCIAL

COMMUNITIES

- Achieve zero new social disputes at our operations
- Resolve all medium and high-risk grievances received through our community response mechanism within the target timeframe²
- Continue expanding our socio-economic programs and projects in the communities near our mines
- Conduct sustainability audits at the operations in Argentina, Mexico, and Canada

HUMAN CAPITAL AND INCLUSION & DIVERSITY

- Implement our Human Capital Development management system at our operations
- Complete the second module “Awareness” of our Building Respect Together program, covering 100% of our workforce

GOVERNANCE

- Train 400 key employees on Anti-Corruption policy
- Assess 150 critical suppliers using our supplier due diligence system
- Commence external verification of TSM performance at our operations

¹ The 2022 base case is our projected 2022 water use, energy use, GHG emissions, and waste generation, as calculated using our life of mine plans adjusted for annual production guidance.

² Grievances should be acknowledged within 15 days of receipt and should be resolved within 90 days of receipt.

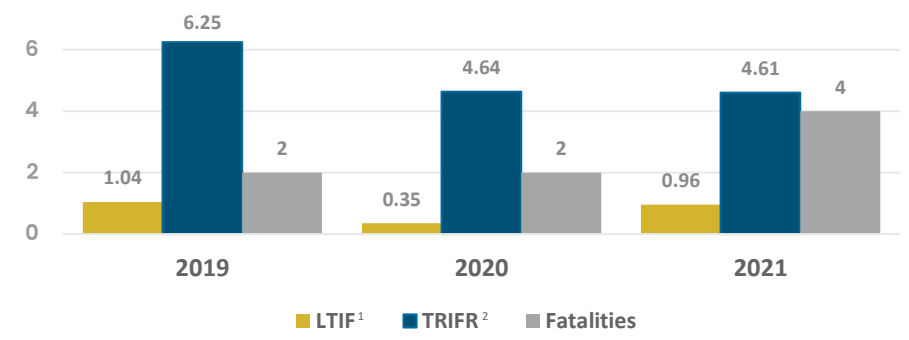


HEALTH AND SAFETY

// Programs & Initiatives

- Implementation of TSM Safety and Health protocol at all our operations
- Serious Injury and Fatality Prevention program
- Health and Safety supervisor training program
- Behavior-based safety programs in Peru, Mexico and Canada
- Corporate Safety Audit program
- Application to join Mining Safety Roundtable

// Historical Safety Performance



¹ Lost time injury frequency (LTIF) rate is the number of lost time injuries (incl. fatalities) multiplied by 1 million hours and divided by the total hours worked in that period.

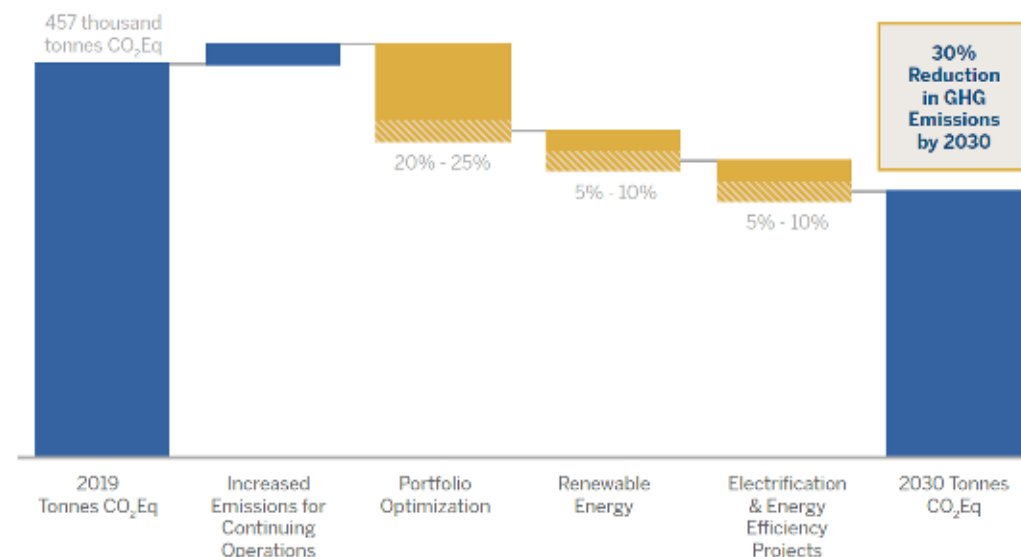
² Total Recordable Injury Frequency Rate (TRIFR) is the number of recordable injuries multiplied by 1 million and divided by the total hours worked in that period.

CLIMATE CHANGE POLICY STATEMENT

// Climate Change Strategy

- **Integrating** GHG emission reduction strategies into our operational risk and opportunities assessments and strategic planning
- **Adapting** our operating and non-operating mines to align with global efforts to reduce GHG emissions and mitigate or prepare for the potential physical risks of climate change
- **Informing** stakeholders in a timely and transparent manner regarding our GHG emission reduction strategies and results as well as the potential transitional impacts to our long-term business plans

// 30% reduction in GHG emissions by 2030 and an aspirational objective of net zero by 2050



ENERGY AND GREENHOUSE GAS EMISSIONS

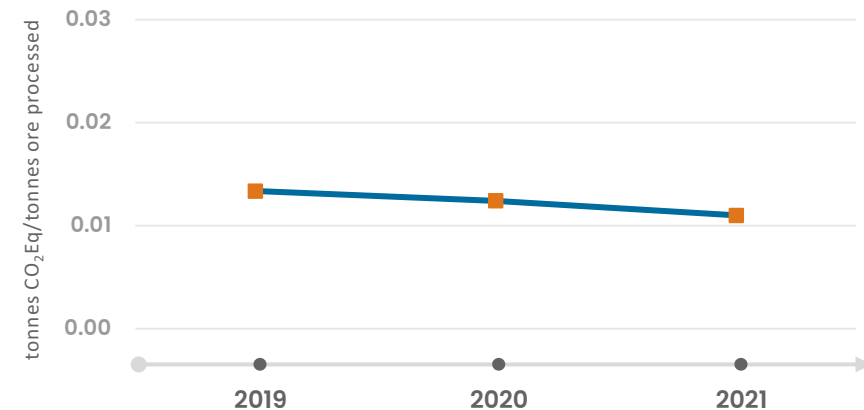
// GHG Emissions Historical Performance

GHG Emissions (Tonnes CO ₂ Eq)	2019	2020	2021
Scope 1 – Direct ¹	313,361	274,522	294,799
Scope 2 – Electricity ²	143,863	111,895	107,255
Total Scope 1 and 2	457,223	386,418	402,054
Scope 3 – Value Chain	668,098	618,332	716,253

¹ Pan American Silver used National Inventory Report Canada to calculate Direct (Scope 1) GHG emissions. The global warming potential (GWP) used for calculations is based on the information provided by the Government of Canada. Gases included in this calculation are CO₂, CH₄ and N₂O.

² Emissions from purchased electricity calculated according to GHG protocol using the IEA 2021 tool for all the mines except Timmins. Emission factor for Timmins provided by the Independent Electricity System Operator (IESO) in Ontario. Gases included in this calculation are CO₂, CH₄ and N₂O.

// GHG Emissions Intensity





RELATIONSHIPS WITH COMMUNITIES AND INDIGENOUS PEOPLES

// 2021 Social Performance

- Updated our Social Sustainability Policy and developed a Corporate Social Closure Standard
- Achieved Level A on the TSM Aboriginal and Community Relationships Protocol
- Sustainability audits conducted at our mines in Mexico, Peru, and Bolivia
- Updated our Community Development Initiatives (CDI) Toolkit
- Partnered with UNICEF Canada on its GiveAVax campaign
- Participating in the ILO 169 consultation process for the Escobal mine, led by the Ministry of Energy and Mines (<https://mem.gob.gt/pueblo-indigena-xinka/>)

// \$11.2 million in Community Investments (2021)



OUR SUSTAINABILITY JOURNEY

// Next Steps

- ✓ Formalize and standardize systems to manage ESG performance and risk across the Company
- ✓ Increasingly demonstrate progress against quantitative targets, both at a site and corporate level
- ✓ Continue to monitor Sustainable Performance Indicators to measure effectiveness of our systems and programs
- ✓ Bring ESG considerations into different parts of our business – how we plan operating budgets, evaluate risk, and allocate capital



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Q & A



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Christian Del Valle

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